OPERATOR/SERVICE MANUAL

MODELS: 71D / 71G

WALK BEHIND ROLLER

Stone Construction Equipment, Inc.
P.O. Box 150, Honeoye, New York 14471
Phone: (800) 888-9926
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A 100% employee-owned American manufacturer

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71D and 71G ROLLER

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LIMITED WARRANTY

The Manufacturer warrants that products manufactured shall be free from defects in material and workmanship that develop under normal use for a period of 90 days for concrete vibrators and electric pumps, one year for Rhino®, Bulldog®, Wolfpac Rollers™, trowels, Stompers®, saws, plates, engine powered pumps, and 6 months for all other products from the date of shipment. The foregoing shall be the exclusive remedy of the buyer and the exclusive liability of the Manufacturer. Our warranty excludes normal replaceable wear items, i.e. gaskets, wear plates, seals, O-rings, V-belts, drive chains, clutches, etc. Any equipment, part or product which is furnished by the Manufacturer but manufactured by another, bears only the warranty given by such other manufacturer. (The Manufacturer extends the warranty period to "Lifetime" for the drum bearings and seals for the mortar mixers, and agrees to furnish, free of charge, the bearings and seals only upon receipt of the defective parts and a Warranty Evaluation Form. The eccentric bearings are warrantied for two years on the plate compactors and five years on the Bulldog line, the trowel gearboxes are warrantied for two years, plus a Warranty Evaluation Form must accompany the defective parts.) Warranty is voided by product abuse, alterations, and use of equipment in applications for which it was not intended, use of non-manufacturer parts, or failure to follow documented service instructions. The foregoing warranty is exclusive of all other warranties whether written or oral, expressed or implied. No warranty of merchantability or fitness for a particular purpose shall apply. The agents, dealer and employees of Manufacturer are not authorized to make modification to this warranty, or additional warranties binding on Manufacturer. Therefore, additional statements, whether oral or written, do not constitute warranty and should not be relied upon.

The Manufacturer's sole responsibility for any breach of the foregoing provision of this contract, with respect to any product or part not conforming to the Warranty or the description herein contained, is at its option (a) to repair, replace or refund such product or parts upon the prepaid return thereof to location designated specifically by the Manufacturer. Product returns not shipped prepaid or on an economical transportation basis will be refused (b) as an alternative to the foregoing modes of settlement - the Manufacturer's dealer to repair defective units with reimbursement for expenses, except labor, and be reviewed with the Manufacturer prior to repair. A Warranty Evaluation Form must accompany all warranty claims.

Except as set forth hereinabove and without limitation of the above, there are no warranties or other affirmations which extends beyond the description of the products and the fact hereof, or as to operational efficiency, product reliability or maintainability or compatibility with products furnished by others. In no event whether as a result of breach of contract or warranty or alleged negligence, shall the Manufacturer be liable for special or consequential damages including but not limited to: Loss of profits or revenues, loss of use of the product or any associated product, cost of capital, cost of substitute products, facilities or services or claims of customers.

No claim will be allowed for products lost or damaged in transit. Such claims should be filed with the carrier within fifteen days.

Effective December 1, 1995.

MODEL NUMBER _____ Serial No._____

Stone®

Stone Construction Equipment, Inc.
Corporate Offices/Northern Mfg. Plant
32 East Main Street, P.O. Box 150
Honeoye, NY 14471-0150

Phone: 1-800-888-9926
Phone: (716) 229-5141
FAX: (716) 229-2363

Stone WALK BEHIND ROLLERS

MODEL	71L/71G	71L/71G	
Drum Type	Single	Single	
Dimensions			
Operating Wt.	945 lbs.	428 kg	
Shipping Wt.	970 lbs.	440 kg	
L X W X H	78"x33"x47"	1995 x 832 x 1200 mm	
Operating Length	78"	1995 mm	
Drum Width	28"	710 mm	
Drum Dia.	23"	575 mm	
Curb Clearance	16"	410 mm	
Wall Clearance	.62 / 4.17"	16 / 106 mm	
Operating System			
Drive System	Hydrostatic	Hydrostatic	
Engine Options	8.3 hp Lister Diesel 11 hp Honda	6.2 kW 8.2 kW	
Engine RPM's	2500 rpm	2500 rpm	
Fuel Capacity	1.1 gallons	4 Liters	
Hydraulic Capacity			
Water System	Non-Corrosive Spray Bar	Non-Corrosive Spray Bar	
Water Tank Capacity	6.6 gallons	25 Liters	
Performance			
Max. Travel Speed	0-2 mph	0-3.2 km/h	
Eccentric Force	2030 lbs.	9.02 kN	
Frequency	3900 rpm	65 Hz	
Macimum Lift			
Gradability w/vibration w/o vibration	25% 33%	25% 33%	
Safety Features	Deadman's Handle	Deadman's Handle	
Standards	Freewheel System Parking Brake Lifting Points, 2 Parking Legs, Front & Rear Adjustable Scrapers	FreewheelSystem Parking Brake Lifting Points, 2 Parking Legs, Front & Rear Adjustable Scrapers	

SERVICE CHECK LIST

USEFUL INFORMATION

Model/Capacity _____

VIN _____

Purchase Date _____

Engine Make/No. _____

_____

_____

Oil Specifications & Quantity

Engine _____

Hydraulic _____

_____

Service	Date
1	
2	
3	
4	
5	
6	
7	
8	
9	

Safety

It is recommended the driver is adequately trained in the safe operation of this machine, has been authorized to operate it and has sufficient knowledge of the machine to assure himself that it is in full working order before use.

Stone Construction Equipment, Inc.
32 East Main Street
Honeoye, NY 14471
USA

For Service/Spare Parts:
1-800-888-9926
1-716-229-5141
Fax: 1-716-229-2363

HEALTH & SAFETY

SAFETY

These machines are designed to carry out the function of compacting material of the non-cohesive, bituminous and granular varieties.

If used correctly they will provide an effective and safe means of compaction and meet the appropriate performance standards.

It is essential that the drive/operator of the machine is adequately trained in its safe operation, be authorized to drive it, and have sufficient knowledge of the machine to ensure that it is in full working order, before being put to use.

SAFETY PRECAUTIONS

Before using this equipment, study this entire manual to become familiar with its operation. Do not allow untrained or unauthorized personnel, especially children, to operate this equipment. Use only factory authorized parts for service.

When warning decals are destroyed or missing, contact the Manufacturer immediately at 1-800-888-9926 for replacement. For the safety of yourself and others, it is imperative that the following rules are observed. Failure to do so may result in serious injury or death.

This notation appears before warnings in the text. It means that the step which follows must be carried out to avoid the possibility of personal injury or death. These warnings are intended to help the technician avoid any potential hazards encountered in the normal service procedures. We strongly recommend that the reader takes advantage of the information provided to prevent personal injury or injury to others.

USE COMMON SENSE WHEN HANDLING FUELS

Transport and handle fuel only when contained in approved safety container.

Do not smoke when refueling or during any other fuel handling operation.

Do not refuel while the engine is running or while it is still hot.

If fuel is spilled during refueling, wipe it off from the engine immediately and discard the rag in a safe place.

Do not operate the equipment if fuel or oil leaks exist - repair immediately.

Never operate this equipment in an explosive atmosphere.

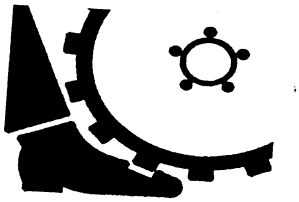
Ear protection required when operating this equipment.

Avoid contact with hot exhaust systems and engines.

Allow engine to cool before performing any repairs.

Never operate unit in a poorly ventilated or enclosed area.

Avoid prolonged breathing of exhaust gases.



Keep feet clear of all drums.

Keep work area free of bystanders

For foot protection, wear steel toe shoes or toe pads.

Caution: Escaping hydraulic fluid under pressure can have sufficient force to penetrate the skin, causing serious personal injury.

Hydraulic fluid escaping under pressure from a very small hole can be almost invisible. Use a piece of cardboard or wood to search for possible leaks.

Never use your hands to detect pressure leaks.

Hydraulic tank temperature can reach 180 degrees F maximum.

OPERATIONAL SAFETY PRECAUTIONS

When using this machine the following list of basic Do ‘ s and Don't’ s should be applied.

This list is not necessarily a complete list, but applying these rules will greatly reduce the possibility of an accident occurring.

Always

• Carry out a daily pre-check of the machine, see ***Care and Maintenance*** section.

• Look around the machine before starting the engine - children could be out of sight.

• Before starting the engine, ensure the transmission control lever is in the NEUTRAL position.

• Examine working area for possible dangers such as trenches, confined areas and people working.

• Clear away obvious hazards and always operate with caution.

• Ensure you have a clear view when driving.

• Exercise great care when working on gradients - especially when crossing.

• Refuel the roller when the engine is stopped.

• Winch or lift the roller from any situation where it cannot extricate itself.

• Wear appropriate protective clothing, headgear and noise protectors, where necessary.

Never

• Attempt to ‘jump’ obstacles such as curbs and manholes.

• Drive at speed over rough ground - drive slowly.

• Leave the roller unattended with the engine running.

• Carry out maintenance unless the engine is stopped and the drums are chocked.

• Tamper with any of the safety devices on the machine.

• Tighten or disconnect any hose while the engine is running.

Safe Operation Decals

The machine has a number of special decals fitted which draw the users attention to various points of operation or safety.

Before Using the Machine

Read all the decals attached to the machine and fully understand their meaning. If you don't understand their meaning contact your supervisor for clarification.

Condition of Decals

Ensure the decals are always clean and readable, replace when necessary.

Spare decals are obtainable from the Manufacturers Service Department.

Gradient Working

In the ***General Specification*** section of this handbook, details are given of the recommended gradient capability of the machine.

The gradients quoted give a general guide as to performance, but conditions existing on site in terms of ground conditions and vehicle speed will have an effect on machine stability, an allowance for which must be made by the driver.

Maintenance Safety

When carrying out routine or scheduled servicing insure:

The machine cannot be inadvertently started

All fluids are handled with care and protective gloves and eye protectors are used where necessary.

Always service the engine as detailed in the ***Engine Manufacturers Handbook***.

HAZARDOUS MATERIALS

'VITON' Seals and 'O' Rings

WARNING

Seals and 'O' rings made from 'Viton' - Fluorocarbon Elastomer - which have been subjected to burning, can be dangerous if handled incorrectly.

Under extreme conditions, the burning of 'Viton' material may produce **Hydrofluoric Acid and Hydrogen Fluoride.**

If 'Viton' seals and O'rings are burnt, precautions must be taken to prevent the 'Viton' from coming into contact with the **SKIN**.

Handle ***ALL*** burnt seals and 'O' rings only when wearing Neoprene gloves. Any part of the gloves which have been in contact with 'Viton' should be washed well with Limewater - Calcium Hydroxide solution - immediately after use.

As it is difficult to identify which seals are made from 'Viton' and which are not, we recommend the above instructions be adhered to when handling ANY burnt seals or 'O' rings.

ASBESTOS

WARNING

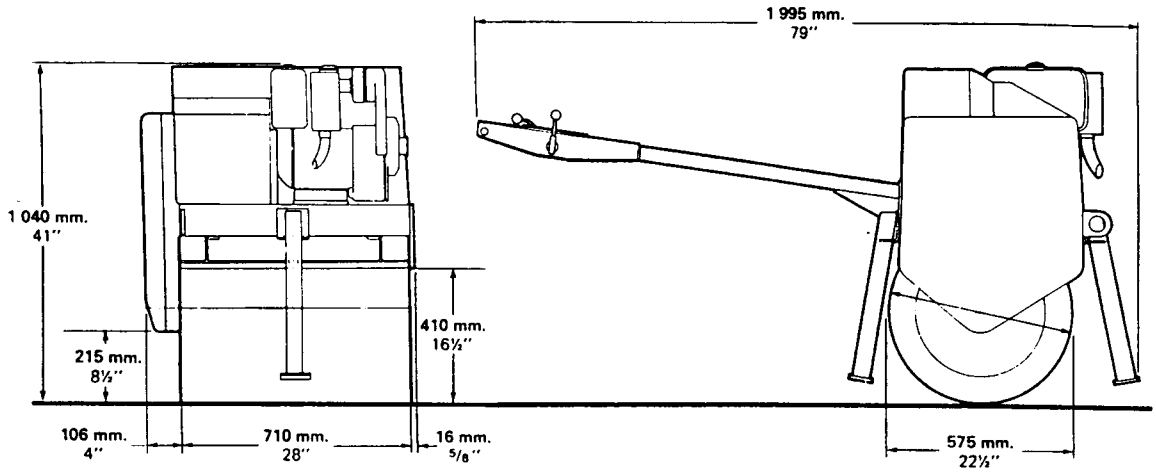
It is possible that some proprietary parts used on this machine use gaskets which have an asbestos content.

This asbestos will be of the 'white' (chrysotile) type which is a lower risk material.

However, risk does occur if the joint is damaged, therefore when undertaking engine maintenance ensure:

- Protective gloves are used.
- The joint is wet to help contain loose fibers.
- Gasket is not ground off - use a scraper.
- Material is disposed of safely.

71D/71G



WEIGHT: 427 kgs. 940 lbs.

Working Principle and Main Features

Working Principle

Forward and reverse drive to the roller drum is by means of a hydrostatic transmission.

A combined hydraulic pump and motor is belt driven at constant speed from a diesel engine and drives the drum through a duplex chain and reduction gear.

Rubber couplings at each end of the drum insulate the transmission and the operator from the effects of vibration.

An eccentric shaft mounted within the drum provides the vibration. It is driven by the engine at a constant speed via a propeller shaft with flexible couplings, a single dry plate clutch and a pre-tensioned Vee belt.

The vibrator shaft rotates at a constant 3900 rpm to give a frequency of 65 cycles per second.

At this speed, a centrifugal force of 920 kg (2028 lbs) is developed. Depending on the condition of the ground being rolled, this results in the drum striking the surface with a force of up to 7480 kg (16493 lbs).

The roller drum is of heavy duty welded steel construction with seam welded plates to prevent the ingress of water.

The vibrator shaft bearings are grease packed and sealed on assembly requiring no periodic lubrication.

An over-center type transmission parking brake is fitted for additional safety when the roller is not being used.

A removable cast aluminum side shield protects and provides access to the drive chain, clutch and vibrator drive belt.

Water Tanks

71D/71G Roller

A 25 liter (6.6 gal) water tank with a large filler cap is rear mounted and a noncorrosive spray bar is fitted with removable end plugs for easy cleaning.

Scraper Bars

Front and rear, adjustable scraper bars are provided on the rollers.

Parking Props

On the roller front and rear parking props are fitted.

Deadmans Safety Feature

The rocking Direction/Speed lever acts as a deadmans safety device.

During normal operation it should only be moved slowly and progressively as explained above. In an emergency, the roller can be stopped instantly, irrespective of its direction of travel, by releasing the rocking lever which will return to its neutral position locking the transmission.

ALWAYS apply the parking brake when the roller is not operational

Control of the Roller

The roller has an infinitely variable travel speed of between 0-3 kph (0-1.8 m.p.h.) in either direction. This gives the operator freedom to select a travel speed best suited to the compaction or finish required. Additionally, when rolling in a confined space, the speed may be regulated to give the degree of control necessary for safety under these conditions.

The operation of both direction and travel speed is by a rocking lever.

Grip the right hand side of the lever and the roller will move in a forward direction. The speed of the roller is governed by the degree of movement of the lever toward the handlebar.

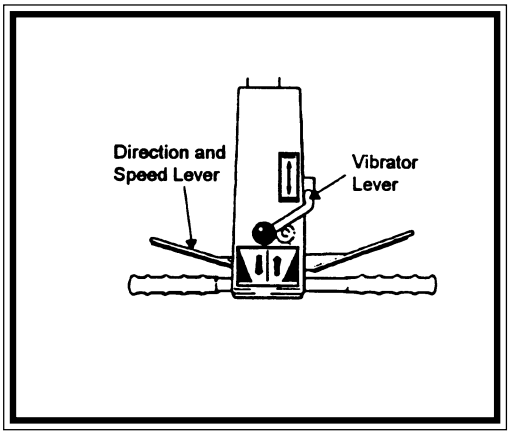
Reverse drive is engaged by similarly gripping the left hand side of the lever.

An advantage of the rocking lever control is that the handlebar is firmly held in both hands, safety containing the torque reaction resulting from moving off or changing direction.

Immediately when the operator releases the rocking lever, it automatically returns to the neutral position, locking the transmission and stopping the roller instantly.

Drum vibration is activated by moving the vibrator lever forward.

This action engages an engine driven clutch which transmits drive, via a belt, to the vibrator shaft located in the drum.



Delivery Checks

Immediately on taking delivery of your new roller and before putting it into service:

- Read the engine manufacturers handbook supplied with the machine.
- Check general condition of the roller.
- Check oil levels in the engine, hydraulic transmission unit.

Finally, read this handbook completely--it could save you a great deal of unnecessary expense.

Engine Starting

Starting the Engine

Before starting the engine ensure:

- The transmission motor hydraulic oil reservoir is filled to the correct 'Cold Level' mark.
- The hydraulic tank is filled to the correct level on the sight gauge.
- The fuel tank is full.
- The vibrator lever is in the disengaged position.

Follow the starting instructions given in the engine manufacturers handbook. If this is not immediately available or has gone astray, make certain the sump oil is to the 'top' engine dipstick mark, the air cleaner is in good condition and correctly fitted. Then proceed as follows:

- Set the Stop/Start control to the START position i.e. lever almost vertical.
- Set the speed control lever to the FULL speed position i.e. lever pulled fully towards starting handle.
- Engage the starting handle, lift and hold the decompressor lever and then crank the engine as fast as possible.
- Push the decompressor lever to the horizontal position and continue to crank until the engine fires.
- Remove starting handle.
- When the engine is running evenly turn the Start/Stop control to the RUN position.

Cold Starting Procedure

There are no special precautions for cold starting down to -10 degrees Celsius (14 degrees Fahrenheit).

Details for starting the engine below this temperature are given in the engine manufacturers handbook.

Main Features

Stopping the Engine

It is advisable to run the engine on light load for a few minutes before stopping it, then move the Stop/Start control to the STOP position and hold until the engine stops.

Never Use the Decompression Lever to Stop Engine

Operating Controls

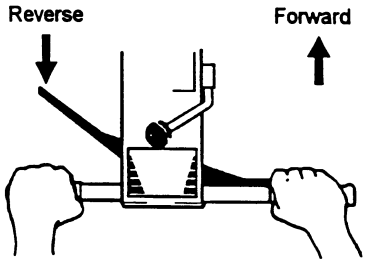
Direction/Speed Lever

The rocking direction/speed lever is spring loaded to the neutral position.

To Drive Forward

Release the parking brake, then gently grip the right hand side of the lever. The speed of the roller is dependent upon the amount of movement of this lever. A small movement will result in low travel speed and full movement of the lever to the handlebar will give full speed.

Move the lever progressively towards the handlebar, gently accelerating the roller until the desired working speed is attained.

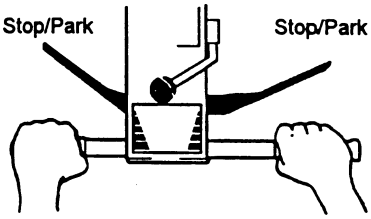


To Stop the Roller

Slowly release the direction/speed level.

To Drive in Reverse

Grip the left hand side of the direction/speed lever and proceed as for forward drive section above.



For safety and efficiency of operation, all movement of the direction/speed lever should be smooth and progressive, particularly when changing direction. Gentle movement of the lever reduces, to a comfortable level, the tendency of the control arm to move up or down each time the travel direction is changed.

Operating Controls

Vibrator Lever

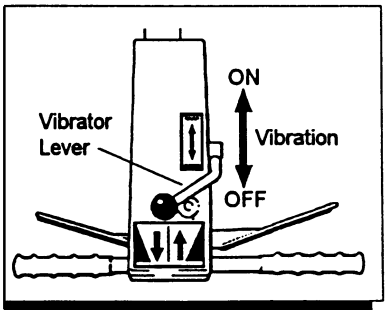
The vibrator lever is of the spring loaded 'over center' type and controls the clutch which starts and stops the vibrator. Move the lever forward to start the vibrator and backward to stop it.

Vibration increases the compaction effort of the roller.

A cold engine may have difficulty driving the vibrator at full speed. Always allow the engine to 'warm up' for two (2) to three (3) minutes before engaging the vibrator.

When initially compacting very loose or soft material e.g. fresh blacktop, the first passes of the roller should be without vibrator and at a fast speed. After this initial compaction, engage the vibrator and select a slow travel speed until the desired finish is obtained.

Never operate the vibrator when the roller is standing on a hard surface or is stationary on a newly compacted surface or indentations in the surface will occur.

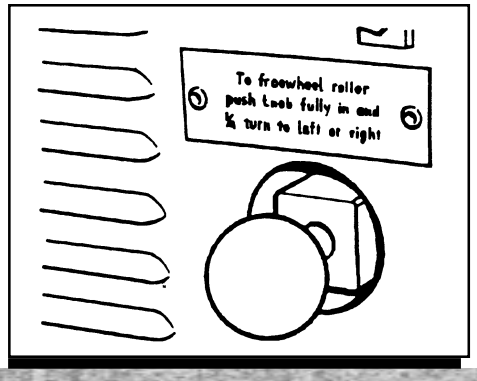


Freewheel Control

The roller is provided with a freewheeling device which enables the roller to be easily moved without starting the engine.

The control is located at the rear of the roller on the right hand side facing the operator.

To operate the freewheel, push the control knob in a give it a 1/4 turn left or right to lock it in position.



Operating Controls cont'd

Water Tank and Sprinkler

Spraying the drum with water during rolling is essential to prevent asphalt loading up on the drums surface..

A tap in the feed pipe regulates the water flow rate or cuts it off when not required.

To Stop or Park the Roller

Always disengage the vibrator, if in use, before returning the direction/speed lever to neutral.

Do not leave the roller unattended with the engine running.

If the roller is to be left unattended stop the engine and apply the parking brake.

If temperatures are likely to fall below freezing point--drain the water tank and spraybar.

Roller Maintenance

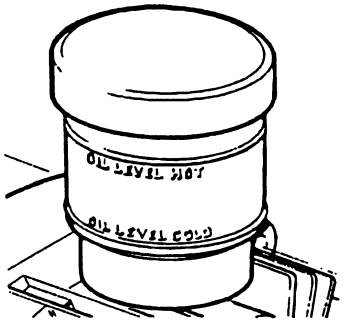
Check tightness of all nuts and bolts after the first 25 hours operation.

Daily

Check Oil Level in the hydrostatic transmission reservoir.

This should be done when the oil is cold because the level varies with oil temperature.

When filling, use only a straight SAE 30 monograde oil.

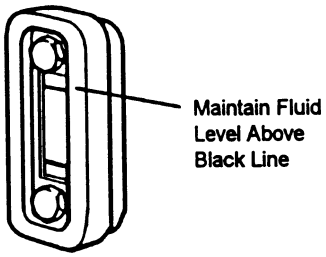


Check Level of Hydraulic Fluid.

Correct level is indicated on the sight glass on the side of the tank.

Take great care at all times to prevent dirt, grit or similar foreign matter from entering the transmission unit or hydraulic system.

Always use a clean container when filling hydraulic reservoirs.

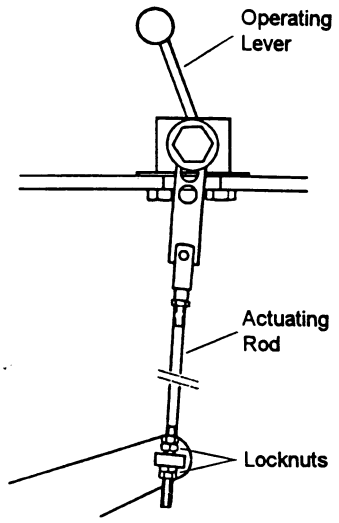


Roller Maintenance cont'd

Monthly

•Change the oil in the transmission unit.

•Check transmission unit toothed drive belt for tightness. The tension is set at the factory and generally requires little attention. If the belt appears slack, retighten by moving the transmission until the belt is taut but not tight.



•Check engine drive coupling bolts for tightness and for wear or damage.

•Check vibrator drive belt for wear and fraying (free from oil, grease and dirt).

•Check the roller drive chain and sprockets for adjustment and wear.

Remove chain cover and degrease chain and sprockets with a solvent cleaner.

Check chain for excessive stretch, wear or damaged links. Check sprockets for wear.

Re-tension chain. If required, by adjusting the jockey sprocket, lubricate chain with chain spray or a heavy duty oil.

Replace chain guard and side cover.

•Check operation of the transmission parking brake. Correct adjustment of the parking brake is vital for safe operation of the roller.

Adjustment of the parking brake is achieved on the four locknuts at the bottom of the actuating rod. When the adjustment is correct, the actuating lever should move freely to the position shown opposite before the over center action of the brake takes effect.

Always allow approximately 0.5 mm clearance between the locknuts and the pivot block.

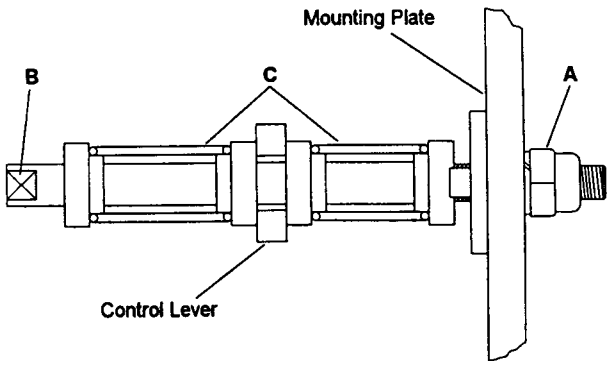
•Check forward and reverse direction lever (Deadman's lever) for creep when in the neutral (off) position. This can only be carried out with the side cover removed and the engine running at full speed.

To adjust proceed as follows:

Remove the right hand side cover to gain access to the self locking nut 'A" on the centralizing rod.

Start the engine and set it to run at full speed and release the parking brake.

Using a 24 mm A.F. Spanner, slacken nut 'A' while holding the end of the centralizing rod 'B' with a 13 mm A.F. open ended spanner.



Roller Maintenance cont'd

Adjust the centralizing rod by screwing it in or out with the 13mm open ended spanner.

Correct adjustment is achieved when creep is eliminated in either direction.

When this has been achieved, retighten nut 'A", holding the centralizing rod with the 13 mm open end spanner.

Grease centralizing rod return springs 'C', if necessary.

When carrying out the above procedure, care must be taken to avoid all moving parts, i.e. fan, drive belt etc.

Maintenance

Engine

For routine maintenance oil changes, adjustments etc. refer to the Engine Manufacturers Handbook supplied with the roller.

Engine	Fuel Capacity	Oil Capacity	Temperature	Oils
Lister LT1 71D	4 liters (8.4 pts)	1 liter (2.1 pts)	-15° C -15° C to +5°C	SAE5W SAE10W
Honda GX340 71G	1.1 liters (2.3 pts)	6.5 liter (13.7 pts)	+5° C to +30°C Over +30°C	SAE 20W/20 SAE30
Change engine oil after the first 100 hours of use and then after every 250 hours of use under normal working conditions.				

Check Daily

•Engine lubrication oil level in the sump. Fill up as necessary using the correct grade of oil as specifiied above.

Fuel Tank Level

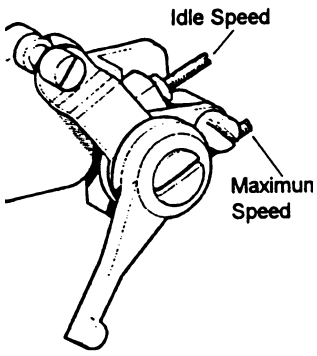
•Air cleaner condition. Engines are fitted with a dry type, replaceable paper element. The normal time between changes is 500 hours, but in severe conditions this could be reduced to 50 hours. Therefore, it is essential to inspect the element at regular intervals and replace it before it becomes clogged.

Engine Speed

Adjustments to engine speed must only be made after the engine has reached operating temperature.

The rated speed under load is 2500 rpm. Therefore, when setting engine speed under a no-load condition, it should be set to 2700 rpm.

If adjustment is required, use a tachometer and adjust the maximum speed screw until the engine speed reaches 2700 rpm. Refer to ***Engine Manufacturers Handbook*** for full information.

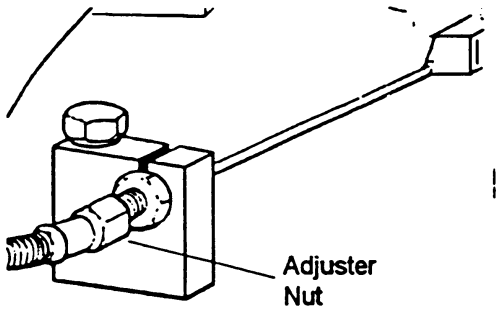


Vibrator Clutch Cable

If correct ajustment cannot be achieved on the adjuster, additional adjustment is available on the cable link under the handle bar of the steering arm.

If the cable has stretched, the clutch will not disengage.

Adjust the cable using the screw adjuster on the stop block at the clutch end of the cable until there is approximately 12mm (0.5 in) of free movement on the lever in the engaged position.



EXPLODED DIAGRAMS & PARTS LIST

Roll Assembly 18-19

Left Hand Side Assembly 20-21

Main Drive and Brake Assembly 22-23

Vibrator Clutch Assembly 24-25

Engine Drive and Hydraulic Motor 26-27

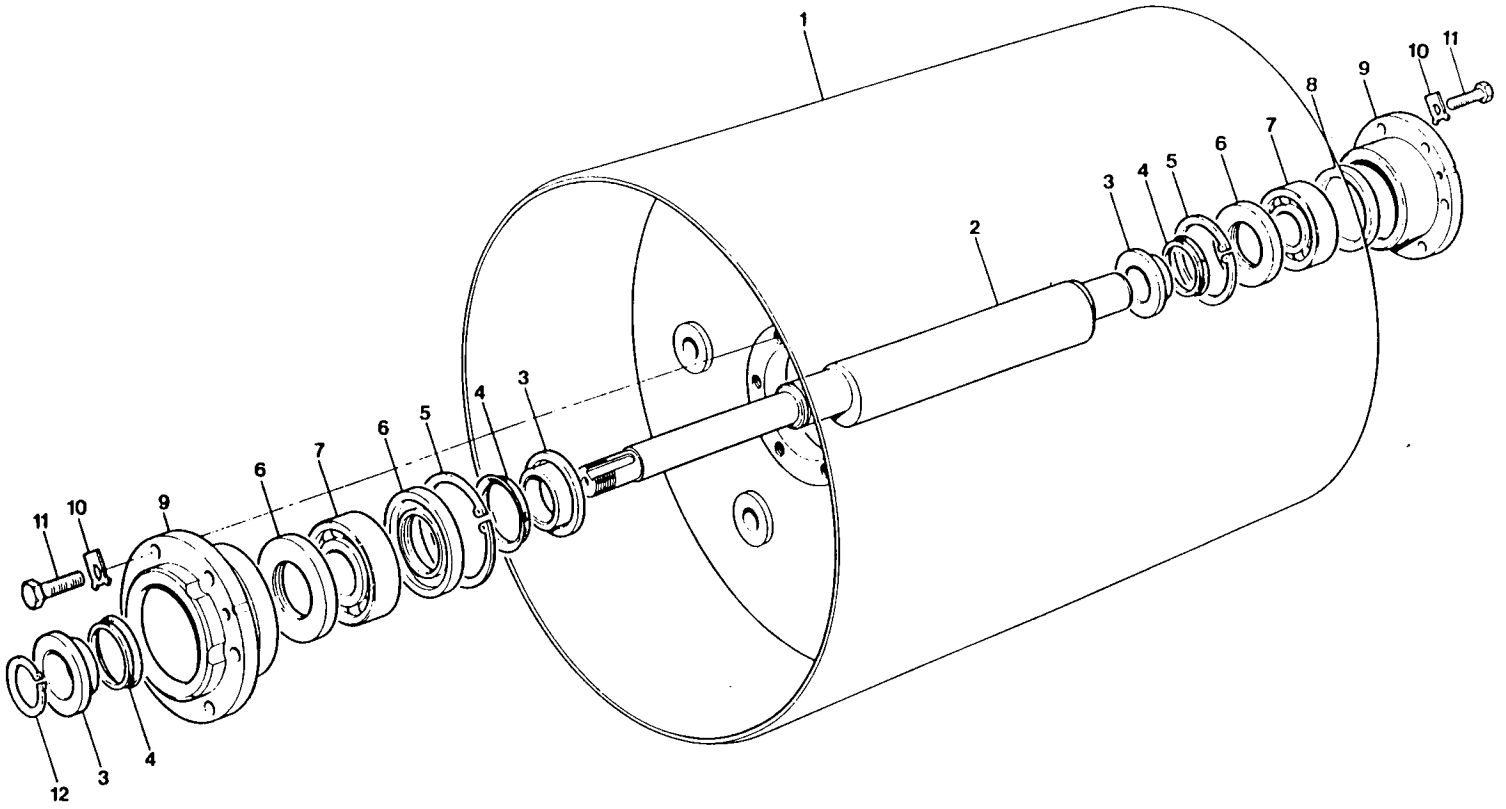
Engine, Water Tank and Main Frame Fittings 28-29

Steering Arm Controls 30-31

Tailgate Hook 32-33

Decals 34-35

Roll Assembly

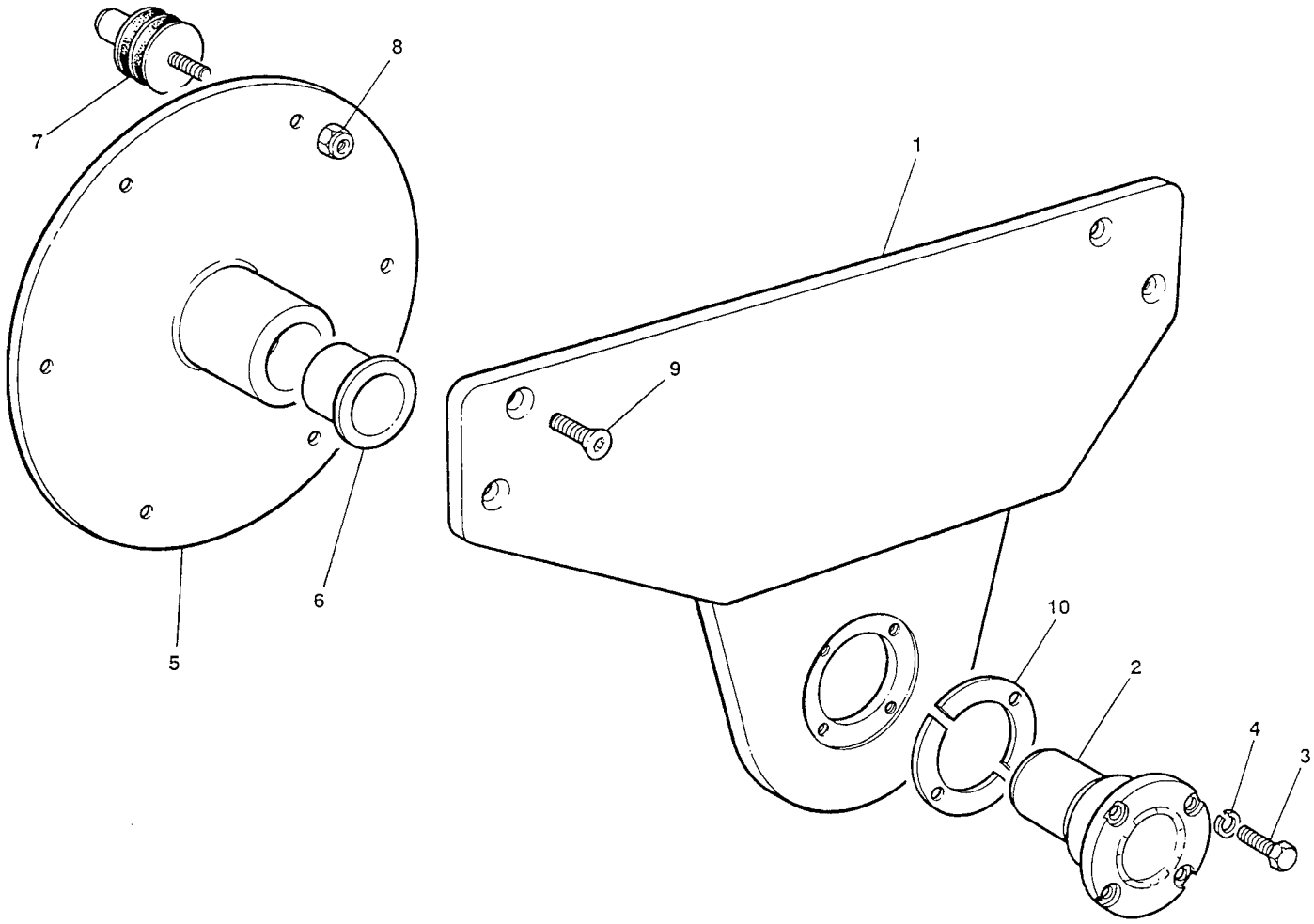


Roll Assembly

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	70112	Roll	1				
2	70191	Vibrator Shaft	1				
3	70516	Seal Retainer	3				
	70517	'O' Ring	3				
4	70196	'V' Ring	3				
5	70579	Circlip	2				
6	70190	End Cap	3				
7	70177	Bearing	2				
8	70188	End Cap	1				
9	70189	Housing	2				
10	70428	Tab Washer	12				
11	70113	Bolt	12				
12	70179	Circlip	1				

REMARK:

Left Hand Side Assembly



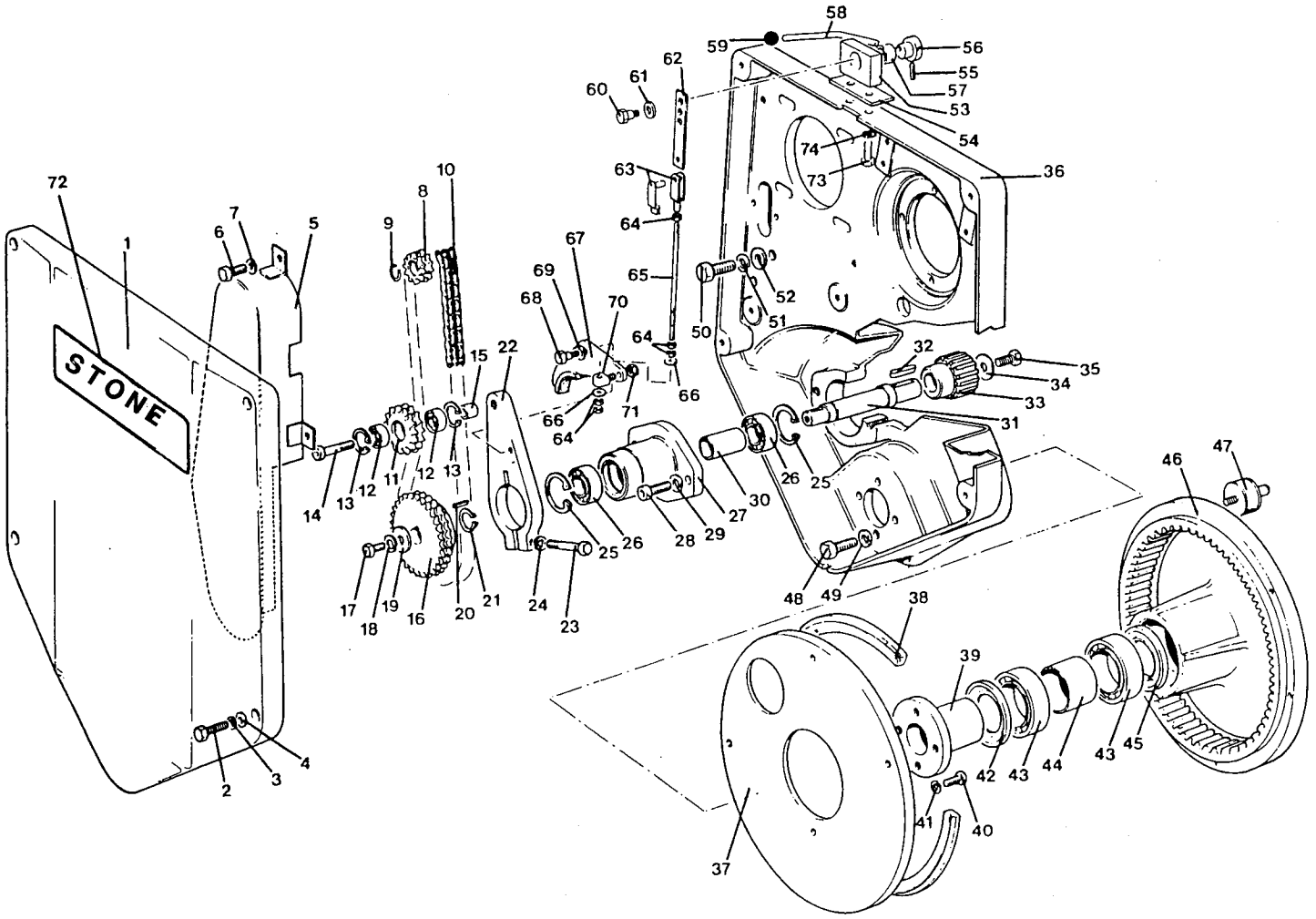
Left Hand Side Assembly

Item	Part No.	Description	Qty.
1	70114	L.H. Side Plate	1
2	70459	Support Shaft	1
3	70115	Setscrew	4
4	70116	Spring Washer	4
5	70213	Rubber Mount	1
6	70199	Oilite Bush	1
7	70193	A.V. Mount Assembly	6
8	70117	Nyloc Nut	6
9	70118	Socket Head Setscrew	4
10	70458	Shim	A.R.

Item	Part No.	Description	Qty.

REMARK:

Main Drive and Brake Assembly



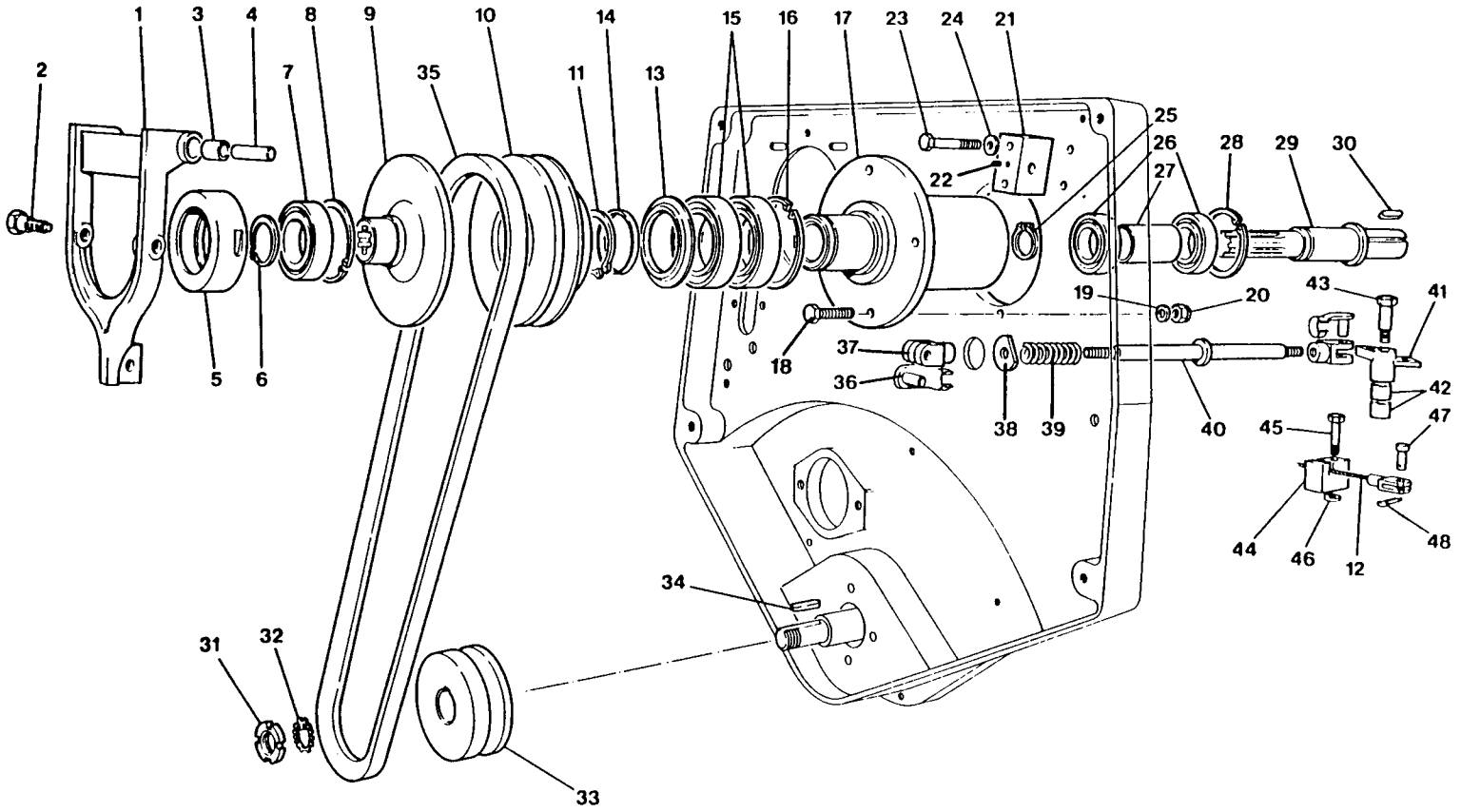
Main Drive and Brake Assembly

Item	Part No.	Description	Qty.
1	70194	R.H. Side Plate	1
2	70120	Bolt	2
	70121	Bolt	2
3	70116	Spring Washer	4
4	70122	Flat Washer	4
	70182	Washer	2
5	70493	Guard	1
6	70123	Setscrew	3
7	70264	Washer	3
8	70489	Sprocket	1
9	70508	Circlip	1
10	70499	Chain	1
11	70478	Sprocket	1
12	70252	Bearing	2
13	70253	Circlip	2
14	70124	Capscrew	1
15	70427	Spacer	1
16	70479	Sprocket	1
17	70125	Setscrew	1
18	70116	Spring Washer	1
19	70303	Washer	1
20	70126	Key	1
21	70580	Circlip	2
22	70477	Bracket	1
23	70127	Bolt	1
24	70128	Spring Washer	1
25	70528	Circlip	2
26	70578	Bearing	2
27	70473	Housing	1
28	70124	Capscrew	2
29	70130	Spring Washer	2
30	70475	Spacer	1
31	70470	Shaft	1
32	70131	Key	1
33	70184	Pinion	1
34	70303	Washer	1
35	70125	Setscrew	1
36	70476	R.H. Side Plate	1
37	70214	Shield	1
38	70175	Seal	1
39	70212	Hub	1
40	70132	Setscrew	4
41	70116	Spring Washer	4
	70735	Sealer	1

Item	Part No.	Description	Qty.
42	70207	Nilos Ring	1
43	70197	Bearing	2
44	70209	Spacer	1
45	70208	Nilos Ring	1
46	70210	Gear Ring	1
47	70157	A.V. Mount Assembly	6
48	70159	Setscrew	4
49	70128	Spring Washer	4
50	70217	Setscrew	4
51	70130	Spring Washer	4
52	70281	Flat Washer	4
53	70154	Pivot Block	1
54	70595	Plate	1
55	70296	Spirol Pin	1
56	70439	Pivot	1
57	70572	Bush	1
58	70440	Lever	1
59	70441	Knob	1
60	70244	Bolt	1
61	70309	Flat Washer	2
62	70156	Link	1
63	70226	Clevis with Pin	1
64	70298	Nut	4
65	70438	Rod	1
66	70301	Flat Washer	2
67	70437	Bracket Lever	1
68	70442	Shoulder Screw	1
69	70309	Flat Washer	2
70	70317	Clevis Pin	1
69	70538	Nyloc Nut	1
	70122	Flat Washer	1
70	70560	Transfer	1
71	70555	Screw	2
72	70558	Taper Washer	2

REMARK:

VIBRATOR CLUTCH ASSEMBLY



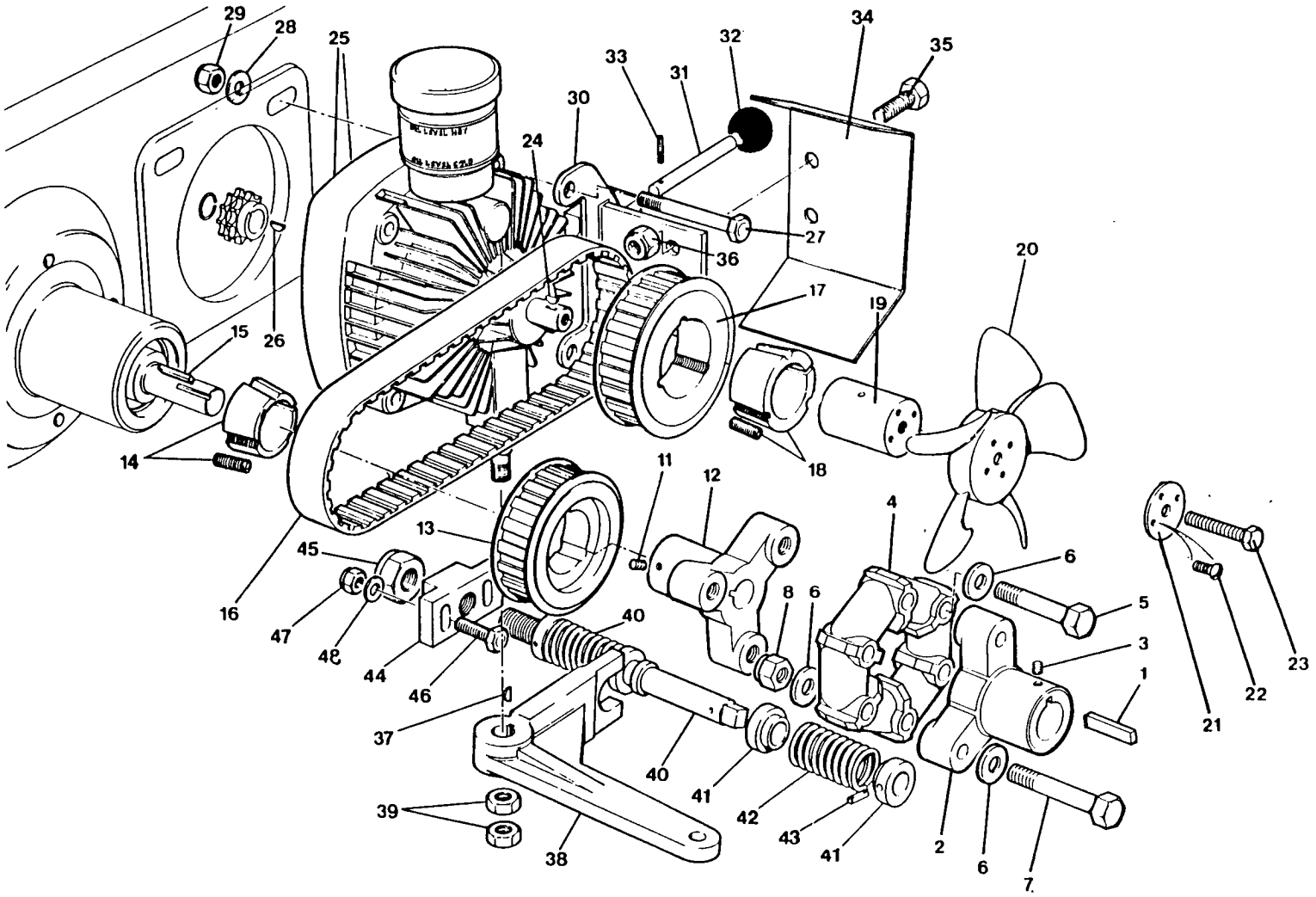
VIBRATOR CLUTCH ASSEMBLY

Item	Part No.	Description	Qty.
1	70195	Clutch Fork	1
2	70221	Clutch Screw	2
3	70200	Bush	2
4	70559	Dowel Pin	2
5	70222	Housing	1
6	70531	Circlip	1
7	70198	Bearing	1
8	70205	Circlip	1
9	70176	Clutch Plate	1
10	70468	Pulley	1
11	70570	Circlip	1
12	70496	Clutch Cable	1
13	70408	Nilos Ring	1
14	70181	Spacer	1
15	70277	Bearing	2
16	70137	Circlip	1
17	70467	Hub	1
18	70596	Screw	4
19	70116	Spring Washer	4
20	70538	Nyloc Nut	4
21	70218	Pivot Blaock	2
22	70597	Grubscrew	2
23	70598	Bolt	4
24	70538	Nyloc Nut	4
25	70172	Circlip	1
26	70278	Bearing	2
27	70462	Spacer	1
28	70204	Circlip	1
29	70464	Spindle	1
30	70131	Key	1
31	70143	Locknut	1
32	70144	Lock Washer	1
33	70471	Pulley	1
34	70131	Key	1
35	70472	Belt	1
36	70203	Pin	2
37	70202	Forkend	2
38	70147	Washer	1
39	70599	Spring	1
40	70223	Rod	1
41	70506	Link	1
42	70574	Bush	2

Item	Part No.	Description	Qty.
43	70507	Pin	1
44	70142	Anchor Bracket	1
45	70121	Bolt	1
46	70309	Flat Washer	1
47	70600	Clevis Pin	1
48	70601	Cotter Pin	1

REMARK:

Engine Drive and Hydraulic Motor



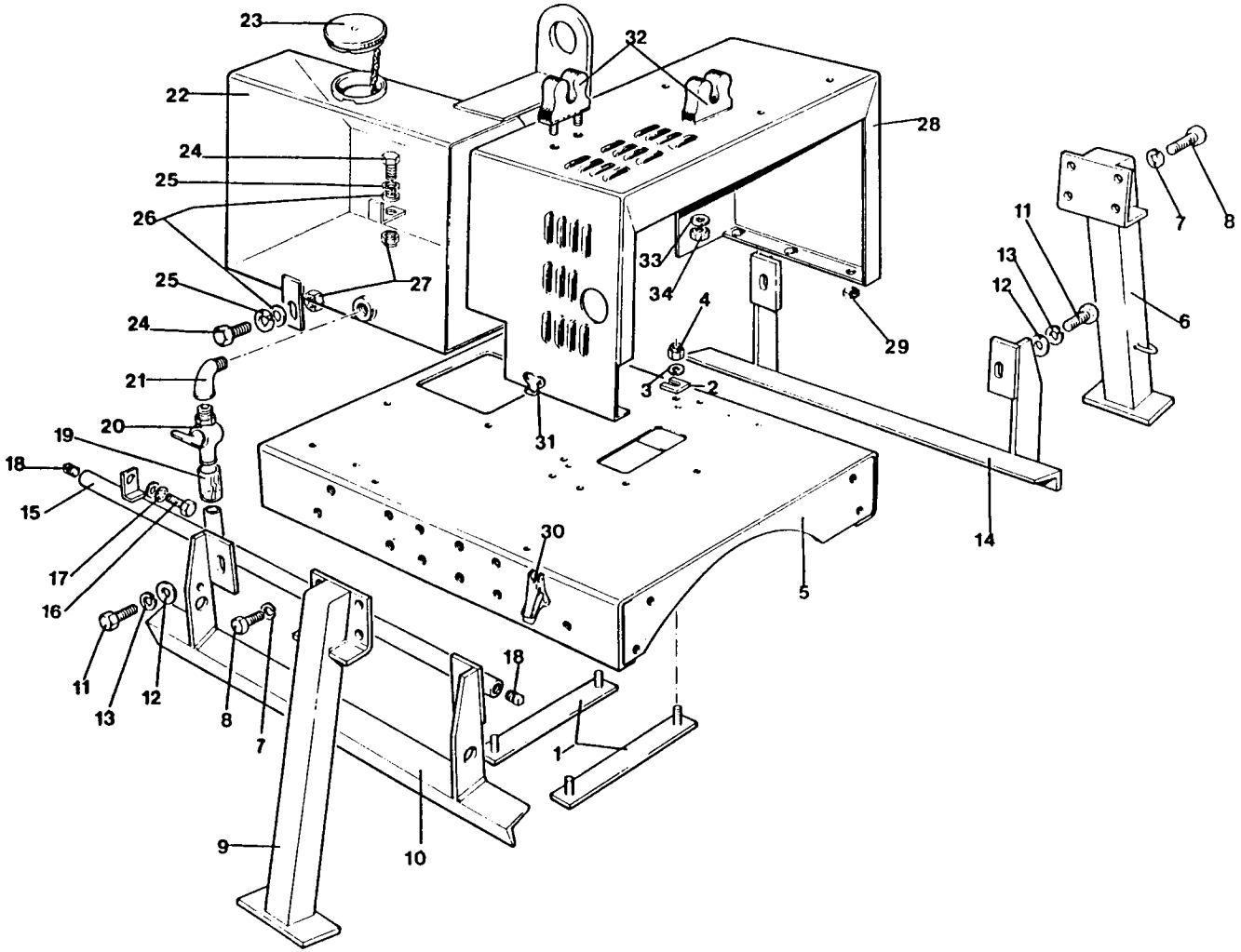
Engine Drive and Hydraulic Motor

Item	Part No.	Description	Qty.
1	70602	Key	1
2	70445	Coupling	1
3	70597	Set Screw	2
4	70443	Coupling	1
5	70603	Bolt	3
6	70604	Flat Washer	9
7	70605	Bolt	3
8	70117	Nyloc Nut	3
11	70597	Grubscrew	1
12	70444	Coupling	1
13	70481	Pulley	1
15	70606	Key	1
16	70488	Belt	1
17	70487	Pulley	1
18	70457	Taperlock Bush	1
19	70456	Shaft	1
20	70480	Fan	1
21	70483	Washer	1
22	70607	Screw	4
23	70608	Bolt	1
24	70609	Key	1
25	70486	Transmission Unit	1
	70736	Reservoir Kit	1
	70737	Shaft Kit	1
	70738	Cover Kit	1
26	70609	Key	1
27	70610	Bolt	2
	70611	Bolt	2
28	70182	Washer	4
29	70117	Nyloc Nut	4
30	70484	Bracket	1
31	70509	Plunger Rod	1
32	70148	Knob	1
33	70612	Spiral Pin	1

Item	Part No.	Description	Qty.
34	70613	Fan Housing	1
	70614	Fan Housing Extension	1
	70615	Setscrew	3
	70616	Nut	3
	70617	Flat Washer	3
	70618	Setscrew	3
	70125	Setscrew	3
	70301	Flat Washer	3
	70619	Washer	2
	70116	Spring Washer	1
	70620	Nyloc Nut	3
	70538	Nyloc Nut	2
37	70609	Key	1
38	70491	Control Lever	1
39	70621	Locknut	2
40	70497	Centralizing Rod	1
41	70498	Spring Locator	4
42	70501	Spring	2
43	70622	Spiral Pin	2
44	70500	Mounting Plate	1
45	70623	Nyloc Nut	1
	70624	Flat Washer	1
46	70625	Bolt	2
47	70538	Nyloc Nut	2
48	70122	Flat Washer	2

REMARK:

Engine, Water Tank and Main Frame Fittings



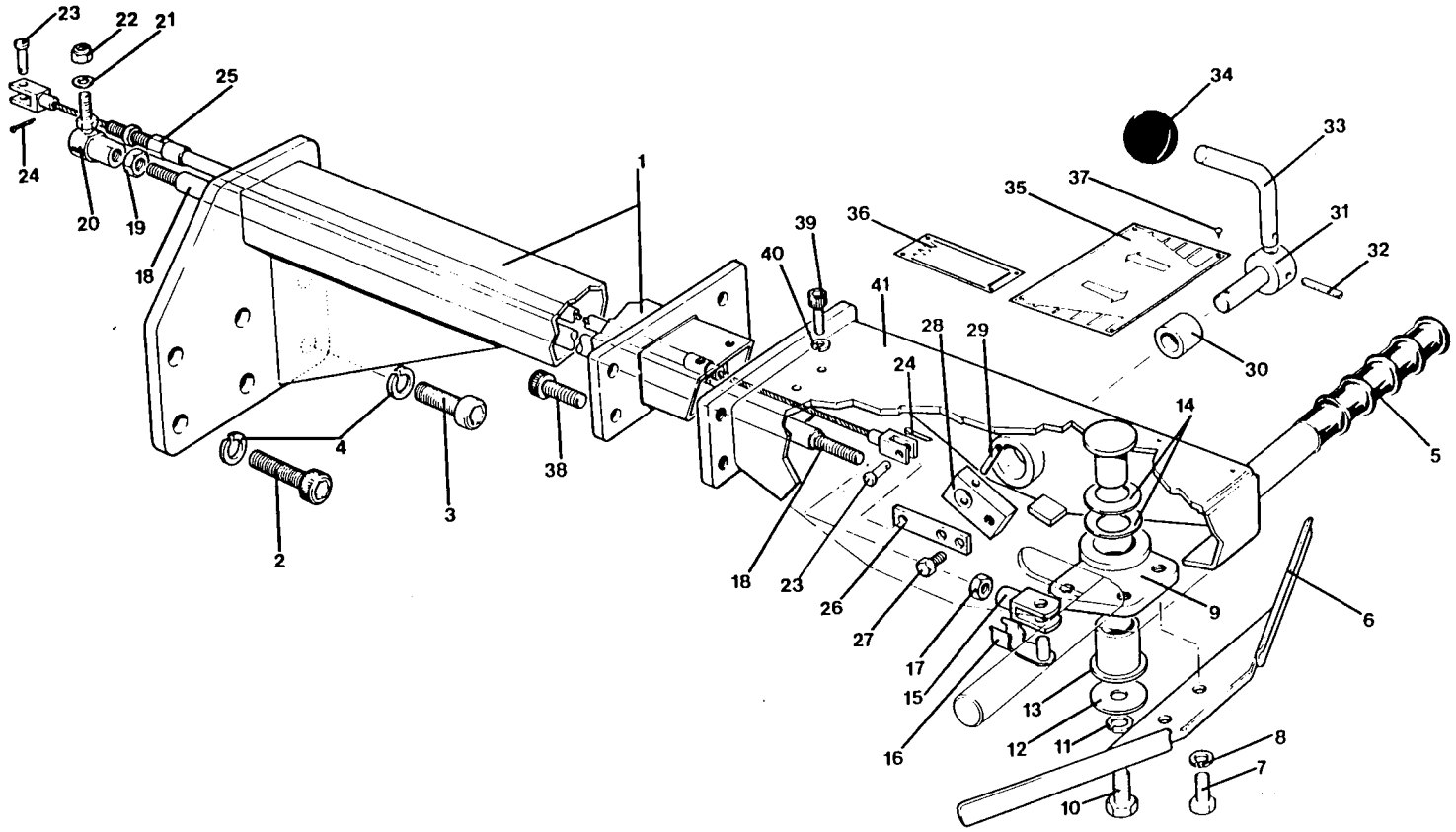
Engine, Water Tank and Main Frame Fittings

Item	Part No.	Description	Qty.
	70452•	Lister LT1 Engine	1
	70591*	Honda GX340 Engine	1
	70626	Air Filter Element Lister	1
	70627	Fuel Filter Element Lister	1
1	70515•	Engine Fixing Plate	2
	70445*	Engine Fixing Plate	2
2	70460	Shim 1mm	A.R.
	70461	Shim 0.5mm	A.R.
	70465	Shim 0.5mm	A.R.
3	70628	Washer	4
4	70629	Nut	4
	70510	Guard	1
	70123	Setscrew	2
	70301	Flat Washer	2
	70620	Nyloc Nut	2
5	70513•	Main Frame	1
	70539*	Main Frame	1
6	70463	Front Parking Prop	1
7	70130	Spring Washer	8
8	70630	Setscrew	8
9	70186	Rear Parking Prop	1
10	70171	Rear Scraper Bar	1
11	70159	Setscrew	4
12	70182	Washer	4
13	70128	Spring Washer	4
14	70494	Front Scraper Bar	1
15	70435	Spray Bar	1
16	70183	Setscrew	1
17	70631	Spring Washer	1
	70301	Flat Washer	1
	70620	Nyloc Nut	1
18	70525	Plug	2

Item	Part No.	Description	Qty.
19	70632	Hose	1
	70514	Clip	5
	70633	Rivet	4
	70634	Rivet	6
20	70192	Tap	1
21	70523	Elbow	1
22	70511	Water Tank	1
23	70229	Filler Cap	1
	70677	Filler Cap Collar	1
24	70159	Setscrew	4
25	70128	Spring Washer	4
26	70182	Washer	3
27	70263	Nut	1
28	70485•	Cover	1
	70594*	Cover	1
29	70571	Grommet	6
30	70135	Toggle Catch	2
31	70136	Catch Plate	2
32	70425	22mm Dia Clamp	1
	70426	28mm Dia Clamp	1
33	70122	Flat Washer	4
34	70538	Nyloc Nut	4
	70635	Starting Handle	1

REMARK: * Used for Honda only. • Used for Lister only.

Steering Arm Controls



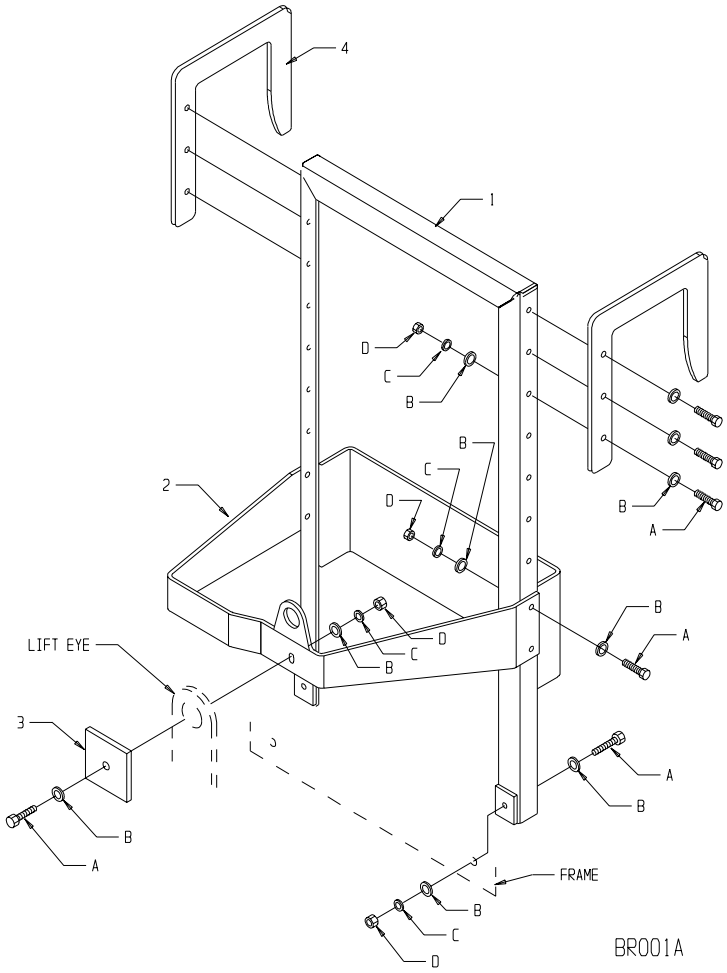
Steering Arm Controls

Item	Part No.	Description	Qty.
1	70636	Steering Arm	1
2	70124	Capscrew	4
3	70630	Capscrew	2
4	70130	Spring Washer	6
5	70134	Handle Griip	2
6	70490	Direction Lever	1
7	70129	Screw	2
8	70116	Spring Washer	2
9	70512	Pivot	1
	70637	Grease Nipple	1
10	70638	Screw	1
11	70128	Spring Washer	1
12	70639	Washer	1
13	70567	Bush	1
14	70436	Disc Spring	4
15	70502	Clevis	1
16	70503	Pin	1
17	70640	Nut	1
18	70504	Rod	1
19	70641	Nut	1
20	70505	Ball Joint	1
21	70309	Flat Waher	2
22	70117	Nyloc Nut	2
23	70600	Clevis Pin	2
24	70601	Cotter Pin	2
25	70496	Clutch Cable	1
26	70156	Link	1
27	70158	Bolt	1
28	70160	Lever	1
29	70642	Pin	1
30	70572	Bush	1
31	70155	Pivot	1
32	70642	Pin	1
33	70167	Rod	1

Item	Part No.	Description	Qty.
34	70148	Knob	1
35	70535	Legend Plate	1
36	70540	Legend Plate	1
37	70644	Screw	8
38	70645	Capscrew	4
39	70647	Capscrew	2
40	70116	Spring Washer	6
41	70648	Control Box	1

REMARK:

Tailgate Hook



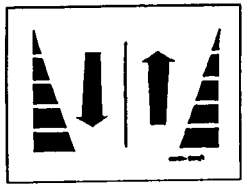
Tailgate Hook

Item	Part No.	Description	Qty.	
1	43155-2	Frame	1	
2	43157-2	Support	1	
3	43159	Plate	1	
4	43158-2	Hook	2	
5	56235	Instructions	1	
A	80844	HHCS M12 - 1.75 x 50 8.8 ZN *	13	931
B	80891	WSHR M12 x 28 OD	26	-
C	80805	WSHRL M12 ZN	13	127B
D	80830	NUTNY M12 ZN	13	985

Item	Part No.	Description	Qty.

REMARK: * Ft. Lbs. 61 Nm 83

Decal Identification



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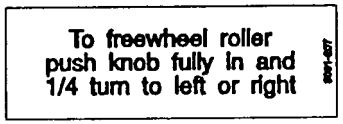
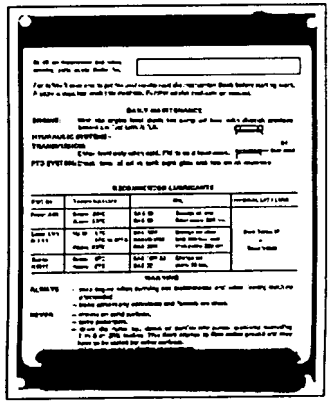
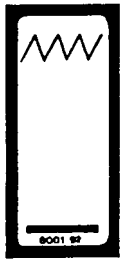


70536

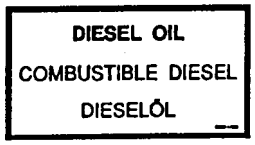
70537



70539



70540



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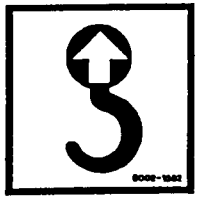
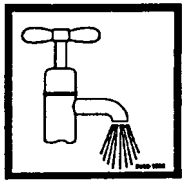


70546



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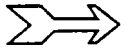

70553

FOR OPERATING AND MAINTENANCE INSTRUCTIONS,
REFER TO HANDBOOK SUPPLIED WITH THIS MACHINE.
FURTHER COPIES AVAILABLE ON REQUEST.

70561

Stone®

55116 / 55298

Decal Identification

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	70535	Forward / Reverse	1				
2	70644	Screw	4				
3	70540	Vibrator On / Off	1				
4	70644	Screw	4				
5	70553	White Arrow	1				
7	70561	Refer to Handbook	1				
8	70541	Diesel Oil	1				
9	70539	Instruction	1				
10	55116	Stone	1				
11	55298	Stone	1				
12	70152	Seloc Washer	2				
13	70552	Warning - Fan	1				
14	70544	Ear Defenders	1				
15	70537	Parking Brake	1				
16	70536	Freewheel Instruction	1				
17	70547	Water Tap	1				
18	70546	Lifiting Point	1				

REMARK:

CALIFORNIA PROPOSITION 65 WARNING: Engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.